ACSA Diversity Achievement Award

2016-2017 Winner Submission Materials

LEARN & GROW: An Educational Garden

ALEXIS GREGORY Mississippi State University



An Educational Garden for the Boys & Girls Club



AN EDUCATIONAL GARDEN

OVERVIEW

A collaborative team of educators and students from architecture, graphic design, health promotion, education, religion, and horticulture has joined together to design and construct the educational garden at the Boys & Girls Club facility. The aim of constructing the garden is to get the children at the Club excited about growing and cooking with homegrown foods.

INTENT

The intent of this project is to work with the Boys & Girls Club to create a project that can be developed and maintained as a way to engage young citizens in learning about architecture, gardening, healthy eating, nature, and self-sufficiency through growing their own food. Nonprofit organizations like the Boys & Girls Club work directly with these children and their families who are most affected by issues of obesity and food deserts. This project intends to address these issues through an educational garden. Due to the important connection between the Boys & Girls Club and the families of the community the collaborative team for this project is working with the Boys & Girls Club to educate children, their parents, and the community on healthy behaviors to lessen the impact of obesity. The collaborative team is accomplishing this through various projects including parental and community engagement to impact child and adolescent health behaviors, curricular development to include the educational garden in lessons for students, arts education utilizing the graphic design and built works of the garden to teach students about art, architecture, and the importance of the built environment.

CHALLENGES

A challenge of the project is to get the parents and community engaged through the education of the children at the Club. This will be achieved through educational programs that use the garden spaces to conduct classes. We are creating outreach events for the parents of the children at the Club, and the community. This includes events like art workshops, educational workshops on how to design your own garden at home, and healthy cooking workshops. It also includes promotional materials that are sent out to the community, local papers, and using social media to support the educational garden and its programs. The project intent is to reach out to an under-served population, which are not typical participants in other similar programs. The children and families of the Boys & Girls Club tend to be low-income and African-American, and we are interested in engaging this population to better educate and encourage them to participate in gardening and healthy habits. Despite having recently experienced significant decreases in prevalence of overweight (16.5% in 2011 vs. 13.2% in 2013) and stability in obesity estimates (15.8% in 2011 vs. 15.4% in 2013) among its adolescents, our state continues to fare worse than the United States on many obesity-related measures for its youth population. Only 19.8% of youth from our state report eating fruit and vegetables five or more times per day during the past seven days.

EDUCATION

Classes are being developed to use the built spaces to educate students about architecture and art. Project activities will include art classes where the students are exposed to artists like Andy Goldsworthy and his use of natural materials, design classes where students study elements of color, form and juxtaposition in the garden and then create designs of their own using what they are learning about nature. We will also have classes about architecture using the new built garden structures to inspire the children to think about the spaces and environment in which they live and learn. The educational garden is intended to educate about food and nutrition and how artistic fields like architecture and graphic design can create spaces that foster these healthy habits. This allows us to help empower the under-served in our state to achieve healthy habits using architecture and art.

AN EDUCATIONAL GARDEN

OVERVIEW







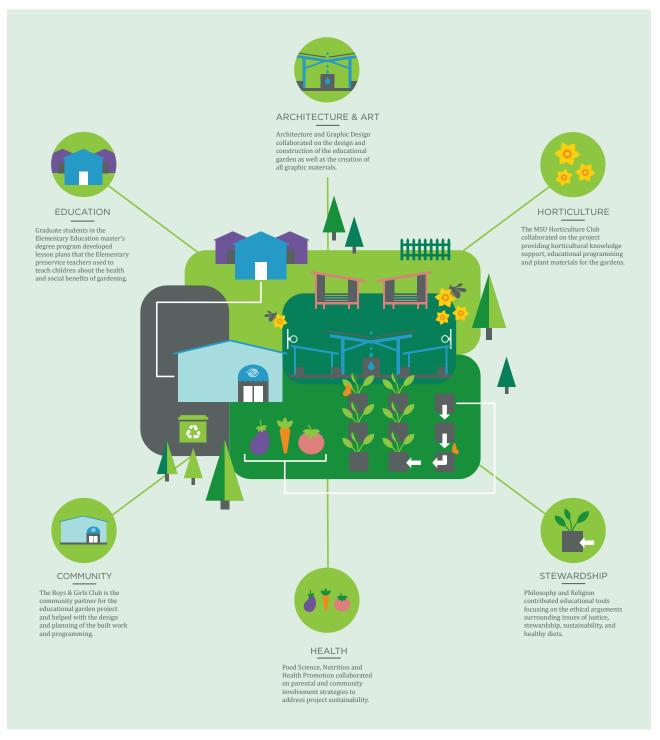
AN EDUCATIONAL GARDEN

OUTREACH: PROMOTIONAL POSTER - FRONT

LEARN & GROW

AN EDUCATIONAL GARDEN

The hope in constructing the garden is to get the children of the Boys and Girls Club excited about growing and cooking home grown foods. This project intends to educate children on how to grow different vegetables appropriate for the Starkville climate. This educational garden will be an example of a community garden that will hopefully grow through the city of Starkville.

















AN EDUCATIONAL GARDEN

OUTREACH: PROMOTIONAL POSTER - BACK

LEARN & GROW

AN EDUCATIONAL GARDEN

The School of Architecture, Department of Art - Graphic Design Concentration,
Department of Food Science, Nutrition, and Health Promotion, Department of
Curriculum, Instruction, and Special Education, Horticulture Club, and Department of
Philosophy & Religion have joined together with the Boys and Girls Club of the Golden
Triangle-Starkville to design and construct an educational garden at their facility.



SCHOOL OF ARCHITECTURE & DEPARTMENT OF ART

The School of Architecture and the Department of Art - Graphic Design concentration are housed in the College of Architecture, Art + Design. Architecture and Art are fully accredited programs within their respective disciplines. Students in the School of Architecture graduate with a five-year NAAB accredited Bachelor of Architecture and students in the Department of Art graduate with a NASAD accredited Bachelor of Fine Arts. The School of Architecture and Graphic Design concentration within the Department of Art collaborated on the design and construction of the educational garden.

 ${\tt CONTACT-Architecture: Alexis Gregory, AlA, agregory@caad.msstate.edu} \\ {\tt Graphic Design: Suzanne Powney, spowney@caad.msstate.edu} \\ {\tt Graphic Design: Suzanne Powney.edu} \\ {\tt Graphi$



DEPARTMENT OF FOOD SCIENCE, NUTRITION, AND HEALTH PROMOTION

The Department of Food Science, Nutrition, and Health Promotion (FSNIP) is a comprehensive department offering teaching, research, and outreach designed to examine the interrelationships of food and nutrition in the context of healthy lifestyles and environments. The mission of FSNIH is to advance an integrative approach to foods, nutrition, and health by innovative research and progressive education of undergraduate and graduate students, and to educate the public through creative outreach. To this end, the department is committed to engagement in scholarly endeavors that encourage and enable adoption of healthful practices and policies at individual, community, and societal levels.

CONTACT - Dr. Brittney Oliver, boliver@fsnhp.msstate.edu



DEPARTMENT OF CURRICULUM, INSTRUCTION, AND SPECIAL EDUCATION

The Department of Curriculum, Instruction, and Special Education is an innovative department within the College of Education, The department offers NCATE - accredited undergraduate and graduate teacher education programs in elementary education, secondary education, special education, and curriculum and instruction. The goal of the department is to recruit and train high quality professional educators for Mississippi classrooms and to prepare researchers and educators for a variety of roles beyond the K-12 classroom. Participants in each of the department's programs are provided opportunities to make connections between research and practice and to experience interactive teaching and learning.

CONTACT - Dr. Kenneth Anthony, kanthony@colled.msstate.edu



HORTICULTURE CLUB

The mission of the Mississippi State University Horticulture Club is to encourage the study and practice of all phases of horticulture. The MSU Horticulture Club offers interested students the opportunity to learn and practice their horticultural skills in an informal, fun, and competitive manner. Club activities include community service projects, plant sales, trade shows, competition at regional and national meetings, and trips. Through the club activities, members have the opportunity to learn and to bring recognition to themselves, the club, and the university. Any interested MSU student is welcome to join the Horticulture Club.

 ${\tt CONTACT-Dr.\ Richard\ Harkess, richard.harkess@msstate.edu}$



DEPARTMENT OF PHILOSOPHY & RELIGION

Housed in the College of Arts and Sciences, the Department of Philosophy and Religion is a dynamic, active group of philosophers and religion scholars with research and teaching strengths in philosophy of the life and cognitive sciences, applied ethics, and religious studies. The department emphasizes interdisciplinary research methods and pedagogies to help students appreciate the value of philosophical analysis and humanities perspectives on numerous contemporary issues, including food security, scientific research ethics, and social justice. Student majors in the department may choose to earn a Bachelor of Arts Degree in Philosophy or a Bachelor of Arts in Philosophy with Religion Concentration.

CONTACT - Dr. Joseph Witt, jwitt@philrel.msstate.edu



BOYS & GIRLS CLUB OF THE GOLDEN TRIANGLE-STARKVILLE

The Boys & Girls Club of the Golden Triangle, Inc. is a 501 (c)(3) non-profit organization that has a vision to be the most effective Boys & Girls Club possible by engaging staff, families, Board of Directors, and the community, while focusing on appropriate and responsive programs and services that meet the needs of all youth involved in the Club. We are dedicated to our core beliefs in providing a safe place to learn and grow, build ongoing relationships with caring, professional adults, delivering life-changing programs and character development experiences, along with creating hope and opportunity.

CONTACT - Nadia Colom, dale.bgcgt@gmail.com















AN EDUCATIONAL GARDEN

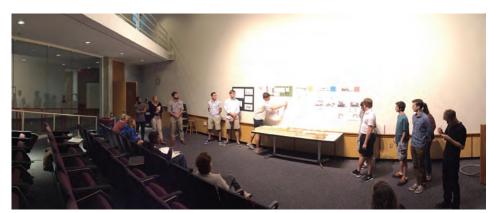
COLLABORATION: COMMUNITY PARTNER

The design studio worked directly with the unit director of the Boys & Girls Club from the first day of class, through the construction phases. The director came to all student presentations to provide critique and feedback, and was on site during all phases construction of the educational garden.

INITIAL SITE VISIT



CONCEPTUAL DESIGN



SCHEMATIC DESIGN



DESIGN DEVELOPMENT



AN EDUCATIONAL GARDEN

COLLABORATION: COMMUNITY SUPPORT

The studio reached out to the community in which the project was being built to ask for support in the form of material donations, funding, and volunteers. Local companies, national companies, and community members locally, regionally, and nationally provided support for the project.

LOCAL COMPANIES



NATIONAL COMPANIES



CROWD FUNDING



VOLUNTEERS





AN EDUCATIONAL GARDEN

COLLABORATION: DESIGN STUDIO

Due to the needs of the project, and the size of the studio, the students were organized to facilitate a collaborative team for the project. Students were given job descriptions for the various roles in the project and chose a role that they were interested in completing as part of the project team. The following are the job descriptions:

Studio Manager:

This team member will work with the Professor, Graphics Coordinator, and Project Manager of the teams to ensure overall continuity of the project. This will include the managing of the time, responsibilities, and performance of the studio.

Graphics Manager:

This team member will work with the Professor, Studio Coordinator, and Project Manager of the teams to create an overall graphic layout and design for the studio. This is to include all presentation boards, construction documents, final studio portfolio, and any additional graphic elements the studio determines are necessary.

Project Manager:

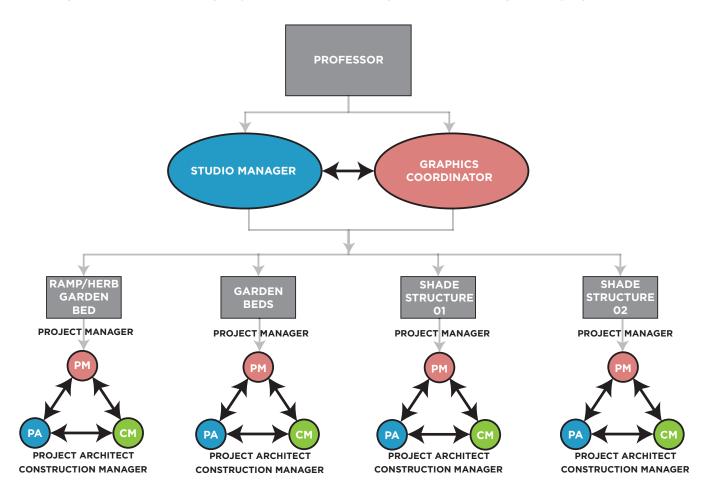
This team member will work with the Professor, Studio Coordinator, the Graphics Coordinator, and the Project Managers for the other teams to manage the time, responsibilities and performance of their team. This will include the coordination of the overall organization of the team and all work completed.

Project Architect:

This team member will work with the Project Architects for the other teams, and Construction Manager on their team, to coordinate all construction drawings. This includes additional research on detailing, materials, etc. needed to accomplish the construction of the part of the project to which their team is assigned.

Construction Manager:

This team member will work with the Construction Managers for the other teams, and Project Architect on their team to create an overall consistency in the detailing and construction of the part of the project to which their team is assigned. This is extremely important for consistency in constructibility of the project.

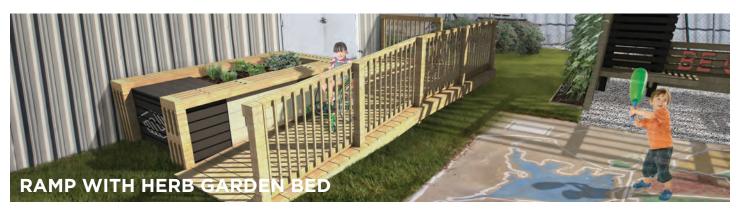


AN EDUCATIONAL GARDEN

DESIGN

The studio worked as one large group to determine the layout of the overall garden design and then divided into their teams to work on the specifics of the design of the four basic pieces of the garden. Students worked with the Horticulture Club to choose appropriate annual and perennial plants for each section of the project.

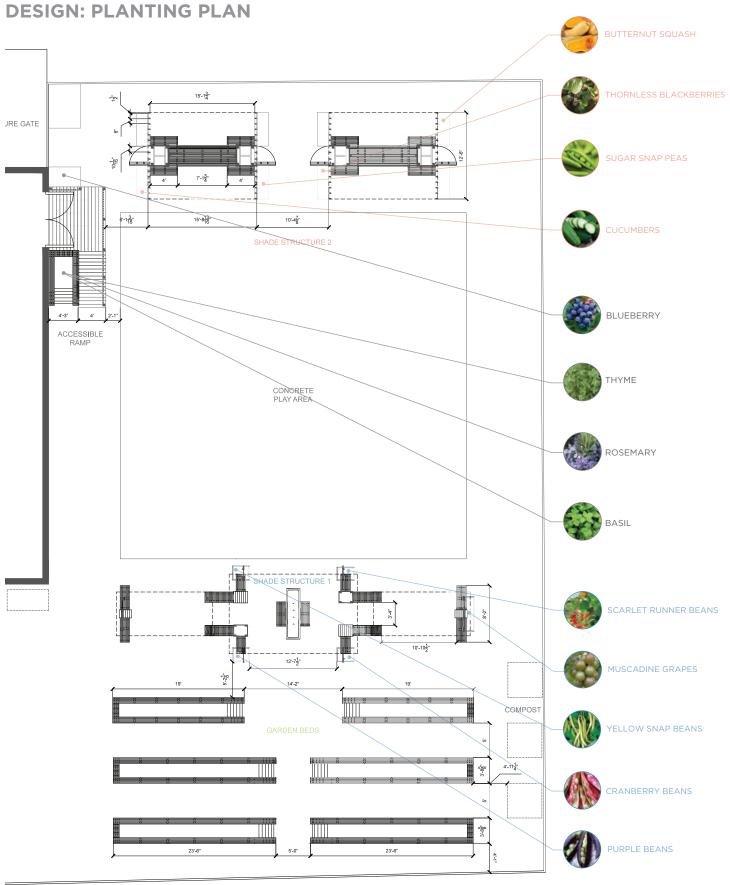


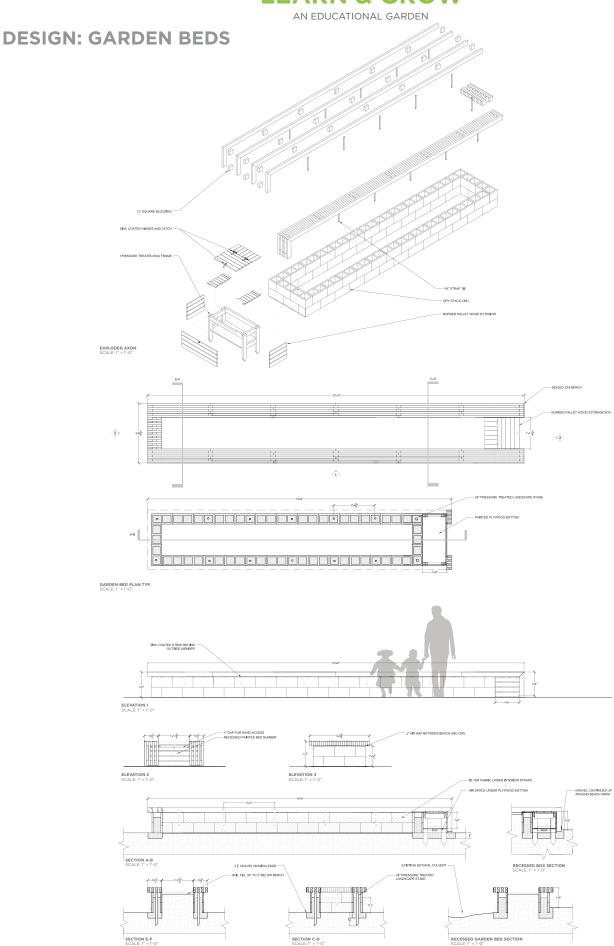






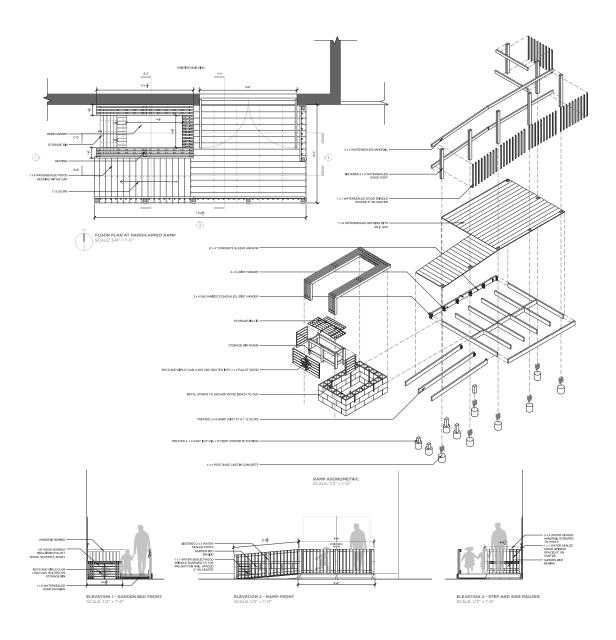
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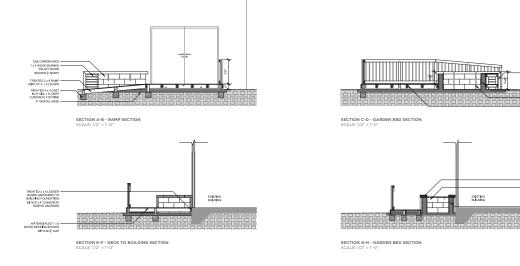




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DESIGN: RAMP WITH HERB GARDEN BED





= 2 × 6 GALVAMZED JOIST HANGER

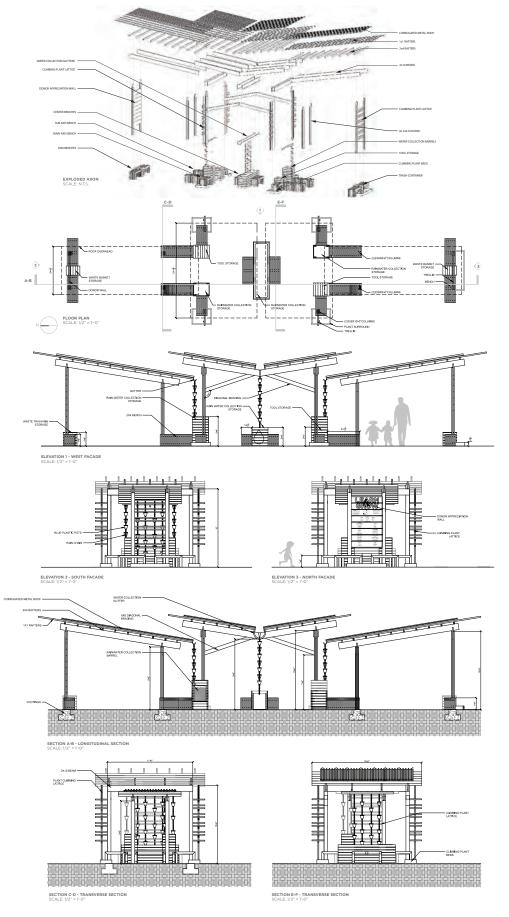
BENCH

METAL STRAP FOR

ANCHORING STORAGE
BIN LID

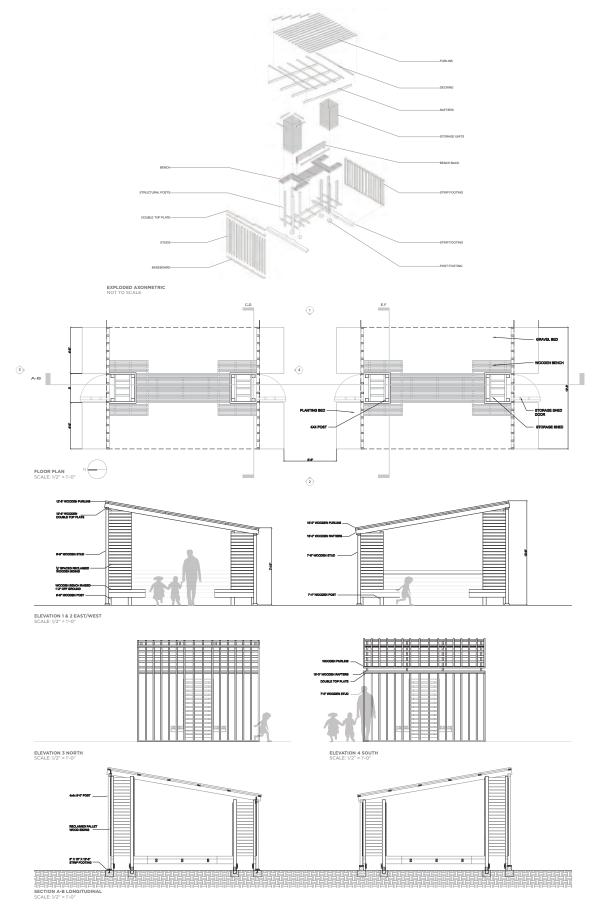
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DESIGN: SHADE STRUCTURE 01



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DESIGN: SHADE STRUCTURE 02



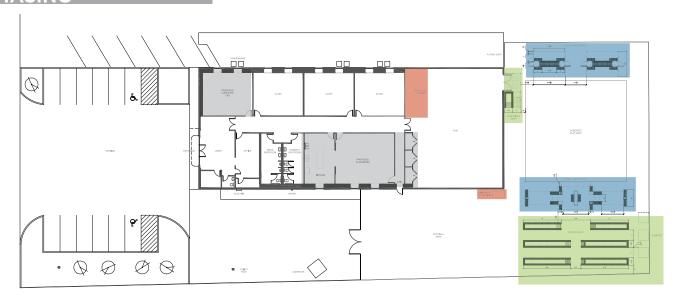
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DESIGN: SITE PLAN & CONSTRUCTION PHASING

SITE PLAN



PHASING



PHASE 1- Garden Beds + ADA Ramp

PHASE 2- Shade Structures 1 + 2

PHASE 3- Rainwater Collection + Cubbies

FUTURE PHASE- Demonstration Kitchen + Classroom Reconfiguration

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COMMUNITY ENGAGEMENT: PRESS

Additional community outreach beyond the solicitation of material donations and outreach through the students at the Boys & Girls Club was done through various press outlets. The university highlighted the project several times over the fall and spring semesters, as well as local television stations, and more.

UNIVERSITY PRESS





LOCAL NEWSPAPER





REGIONAL NEWS





REGIONAL MAGAZINE







AN EDUCATIONAL GARDEN

COMMUNITY ENGAGEMENT & PROJECT MANAGEMENT: DIGITAL TOOLS

Digital tools were also utilized for community outreach locally, nationally, and internationally. Interested parties can follow the project on social media, and can donate funds to a crowd funding campaign. The design studio used digital tools to communicate and share files to develop and create the project.

OUTREACH







TWITTER



INSTAGRAM

FUND RAISING



GOFUNDME

COMMUNICATION



GROUPME

FILE SHARING





AN EDUCATIONAL GARDEN

IMPACT: FEEDBACK

The project has so far been run over two semesters in the architecture program from Fall 2015-Spring 2016. The first semester was a 4th year design studio where the students worked with the client/community partner to design the project and begin construction on Phase 01. The second semester was an elective where students from the previous semester continued construction on the project. Feedback from the client/community partner and students from both semesters give a snapshot into the impact of the project for these parties.

CLIENT FEEDBACK

"I know our kids aren't as exposed to nutrition and gardening as they should be. So this project will definitely get the community involved, will get the parents involved, and will give us the opportunity to change our focus."

Jeffery Johnson Unit Director, Boys & Girls Club of the Golden Triangle, Inc. - Starkville Interview with WTVA News November 24, 2015

* See also the support letter from Nadia Dale Colom, Executive Director of the Boys & Girls Club of the Golden Triangle, Inc.

STUDENT FEEDBACK

Selected comments from Fall 2015 Faculty Evaluations
Initial Design Studio course that started the project - Phase 01
"Great experience this semester. It was good to have an actual client and get some construction experience."

"Doing a service-learning project was a great idea..."

"Great enthusiasm and very helpful."

"Enjoyed the studio organization that resembled a firm. It was fun working directly with the client. I enjoyed my role in the studio project."

"She did a good job encouraging design..."

"Professor Gregory has been a fantastic teacher, not only caring about what students produce but also the student themselves. She is considerate, accommodating, understanding and fair. She expects results from her students, and we are motivated by her to push ourselves and to do our best, better than we thought possible."

"This was a good project..."

" It was nice to actually have interactions with a client."

"It was fun working with client."

"...I had fun and learned a lot."

Selected comments from Spring 2016 Faculty Evaluations
Elective course that continued the project - Phase 02
"Great class and I loved I got to help finish the project from last semester. Construction experience is important and Professor Gregory is an honest as well as competent teacher. She definitely knows her stuff. I also had a blast!"

"Great professor!!!"

"Enjoyed the hands on experience."

AN EDUCATIONAL GARDEN

IMPACT: CURRENT PROGRAMMING

The project is meant to continue after the architectural elements are constructed. During the summer of 2016 programming began by engaging the students in planting and art projects. Students also learned about sun safety while working outside in the garden by applying sunscreen and using hats to shade their faces.

PLANTING SEEDLINGS





GARDEN SIGNS





COMPOST & BUGS





PICKING VEGETABLES





AN EDUCATIONAL GARDEN

IMPACT: FUTURE PROGRAMMING & CONSTRUCTION

Future programming using the Educational Garden includes activities for the children with current collaborative partners, like the Horticulture Club, but also activities with new partners such as Students for a Sustainable Campus, the Entomology Club, the Student Diatetic Association, AIAS, and NOMAS. Additionally, the collaborative team has applied for several grants to continue programming with outside consultants that teach classes on art and nature, environmental sustainability and nature, and architecture.

Future construction includes the construction of Shade Structure O2, and support structures for the garden, such as compost bins and rainwater collection. The ability to begin construction on these remaining architectural elements depends on whether the collaborative team is successful with their grant applications to fund the construction.

STUDENT CLUBS



GRANTS

SHADE STRUCTURE 01



SUPPORT STRUCTURES



